

Industrial Motors

Liquid Electrical Insulation Resin Solutions



Industrial Motors

An industrial motor is important in the operation of machines employed in various industries. Since a company's performance and profitability depend on the efficiency and reliability of these machines, protection of the motors is key.

To keep these machines running like new, they depend on a proven electrical insulation system. The system provides protection from temperature changes, chemicals and moisture.

Product Summary

Epoxylite®, Pedigree®, RanVar™, ELAN-Safe®, ELAN-Guard® and Isonel® insulating resins are perfect for keeping your industrial motors in top performance condition day after day.

Epoxylite® resins are used in overcoating and impregnation of armatures, stators and coils in motors and generators.

Pedigree® resins offer a long field service history in impregnation of motor coils.

RanVar™ resins provide outstanding moisture and chemical resistance in small and large motor applications.

ELAN-Safe® resins are low VOC and formulated without HAPS. These waterborne products are perfect for impregnation of motors.

ELAN-Guard™ resins are environmental friendly epoxy emulsions with excellent bond strength and suitable for use in hermetic applications.

Isonel® resins are longstanding industry standards for use in general purpose motor applications.



ELANTAS PDG, Inc. is a team of professionals with access to the latest international research developments and technical advancements in the production of high quality electrical insulation products offering long term reliability.

Solutions For

- Reducing Emissions
- UL Recognition
- Reducing Cycle Time
- Medium Voltage Applications
- High Voltage Applications
- Severe Duty Applications



Application Methods

VPI • Trickle Dip & Bake



Product Characteristics at a Glance

					Voltage Application Method					
Product	Unique Characteristics	Thermal Class MW35 Twisted Pair	Viscosity (cP) @ 25°C/77°F	High	Medium	Low	VPI	Dip & Bake	Trickle	
RanVar™ R2003 VTC	A unique copolymer resin in vinyl toluene. It exhibits excellent moisture and chemical resistance. It is a high bond strength resin used in the impregnation of small and large motors including high voltage. Included in multiple UL recognized insulation systems.	180	450 -750	1	1	<	√	1		
Pedigree⊚ 433-75 VTC	An unsaturated polyester resin in vinyl toluene. It is an excellent choice for impregnation of stators and transformers with high bond strength. Included in multiple UL recognized insulation systems.	180	600 - 900	1	√	√	√	√		
RanVar™ B7-373 VT RanVar™ B7-373 VTC	A semi-rigid, unsaturated polyester resin in vinyl toluene. Excellent penetration capability. Good film build for a single dip. Low dissipation factor at elevated temperatures. Excellent chemical and moisture resistance. Available in two-component or single-component precatalyzed versions. Included in multiple UL recognized insulation systems.	180	900 -1200	>	✓	>	>	*		
ELAN-Safe® 21-0U01-75	A single-component waterborne resin offering lower VOC than conventional insulating varnishes. Used in the impregnation of motor coils. Supplied at 75% solids and ready to be thinned with water. Included in multiple UL recognized insulation systems.	180	7000 - 20000		√	~		√		
Pedigree⊚ 70 VTC	An unsaturated polyester resin in vinyl toluene. It is a highly versatile, resilient resin and an excellent choice for impregnation of motor coils. Included in multiple UL recognized insulation systems.	180	275 - 450 150 - 200	√	✓	<	>	✓	✓	
Pedigree⊚ 8183 VT	A semi-rigid, unsaturated polyester resin in vinyl toluene. Its low temperature cure makes it an excellent choice for impregnation of small and large stators and armatures. Included in multiple UL recognized insulation systems.	180	150 - 250			√		✓	√	
Epoxylite® E 478 Thixo	A heat curing epoxy resin system designed for use with uncatalyzed tapes. Designed for use in medium voltage motors and generators as well as random wound motors. Offers low viscosity, thermal ratings up to 180°C, excellent stability and is not moisture sensitive. Included in multiple UL recognized insulation systems.	180	1500 - 3000		√	>	>			
ELAN-Guard⊚ EM 59 MR Series	An epoxy emulsion resin with excellent resistance to all types of refrigerants. Used in the impregnation of motor coils. Offers low viscosity and high stability, can be thinned with water and has zero VOC. Included in multiple UL recognized insulation systems.	180	10 - 200			~		✓		
Isonel⊛ 31-398	A general-purpose, solvent-borne insulating varnish used in the impregnation of motor coils. Has low viscosity and offers excellent stability. Included in multiple UL recognized insulation systems.	180	250 - 350			*		✓		

Alternate cure schedule may be possible for your application. Consult with your ELANTAS PDG representative.

ELANTAS PDG, Inc.

ELANTAS Electrical Insulation

Around the world, ELANTAS Electrical Insulation companies are respected as market leaders in the development and manufacturing of impregnating resins (varnishes), wire enamel, potting compounds and casting resins for a number of electrical, industrial, aerospace and civil applications. No matter what your challenge, be assured that ELANTAS Electrical Insulation products will meet your most demanding needs.

ELANTAS PDG, Inc.

Today, ELANTAS PDG, Inc. is recognized as the premier global supplier of specialty polymers for the electrical and electronic industries. ELANTAS PDG, Inc. is a member of ALTANA's ELANTAS Electrical Insulation Division based in Wesel, Germany.

With the support of ALTANA and by working with other ALTANA divisions, we offer a unique global approach to research, manufacturing and service that translates into more creative solutions, dependable supply and consistently high quality.

Many ELANTAS PDG, Inc. products are recognized as components of electrical insulation systems in accordance with UL 1446. ELANTAS PDG, Inc. is registered to ISO 9001 and ISO/TS 16949.

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A member of **ALTANA**



ELANTAS PDG, Inc. headquarters in St. Louis, Missouri

ELANTAS Electrical Insulation companies are strategically located throughout the world to meet the primary insulation, secondary insulation and electronic and engineering materials needs of our customers.

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